HYPTIS RADIATA (LABIATAE) AN ILLEGITIMATE NAME. — Hyptis radiata Willd., Sp. Pl. (ed. 4) 3 pt. 1:84, 1800, was published as a new name for Clinopodium rugosum L., Sp. Pl. (ed. 1) 2: 588, 1753 (Willdenow of course cited ed. 3, with page no. 822, but the name originates in the first edition). Because the epithet rugosum was available for use under Hyptis but was not retained, the binomial Hyptis radiata is automatically illegitimate by present rules. Because of the validly published Hyptis rugosa Benth., Lab. Gen. et Sp. p. 86, 1832, the Linnaean epithet cannot now be transferred to Hyptis. In Carl Epling's "Synopsis of the genus Hyptis in North America" (Fedde Repert. Sp. Nov. 34:73-130, 1933), the only available name seemingly is H. latidens Urban, 1926, three other binomials published by Gandoger in 1918 being listed as "nomina" only (1. c. p. 118). This is not correct, for Gandoger supplied Latin diagnoses in the form of keys, and cited specimens, so that all three of his names were validly published (Bull. Soc. Bot. France 65: 66, 1918). The identity of these will be discussed later.

The hitherto unidentified *Pycnanthemum? alatum* Rafinesque, Fl. Ludov. p. 40, 1817, has never been listed in any synonymy under *Hyptis*, although Rafinesque himself thought it might really belong to that genus. Here is his account:

116. Pycnanthemum? alatum Raf. — Foliis oblongis, acutis, dentatis, subtus tomentosis, longe petiolatis, petiolis alatis, capitulis longe pedunculatis, involucris 13 phyllis, alternis longioribus. Raf. — Monarde bouton Rob. p. 388. Stems four feet high, four angular, grooved and branched, leaves green above, flowers white, unfolding gradually. Faintly aromatic and bitter: vulgar name herbe à bouton; Robin owns it has four stamina: but says it has all the other characters of Monarda. It is perhaps a Hyptis.

Anyone who has seen the Gulf Coast Hyptis radiata will recognize at once that it is exactly what Rafinesque de-

scribed. Since his specific epithet has not been used under *Hyptis*, and is much older than those of Gandoger and Urban, the correct name for *H. radiata* becomes *H. alata* (Raf.) Shinners, comb. nov., based on *Pycnanthemum*? alatum Raf., quoted above.

Of the three species published by Gandoger (all on the same page), the first, H. floridana, was described as "pubescens, caulis copiose setoso-muricatus, folia basi rotundata deltoidea, bracteae florales calyce breviores, sepala vix 1/2 mm. longa. — Florida, ad Jacksonville (Williamson!)." The pubescent and muricate stem, broad leaf blades, small floral bracts, and very short calyx teeth are all perfectly characteristic of H. mutabilis (A. Richard) Briquet, and H. floridana Gandoger is to be listed as a synonym of that species rather than of H. alata (H. radiata). Gandoger's other two species are discussed together separately from H. floridana, and are plainly forms of H. alata. The third is the common and widespread type, identical with H. radiata Willd. and Pycnanthemum? alatum Raf.: "Involucri phylla capitulum villosum superantia, caules ad angulos hispiduli, folia late oblonga. — America sept., Mississippi ad Biloxi (Tracy n. 61!) et ad Mendenhall (ejusdem n. 8757!)." The first number cited is adopted as lectotype of H. Tracyi. I have seen only topotype material (Demaree 28392, SMU).

Gandoger's second species, *H. leiocephala*, was a more glabrous and narrow-leaved form: "Involucri phylla capitulo glabro breviora, caules ad angulos glabri, folia anguste oblonga. — Florida, ad Jacksonville (Keeler! Leggett!)." This sounds very similar to *H. latidens* Urban, Fedde Repert. Sp. Nov. 22: 368, 1926, from Cuba, considered by Epling only a form of *H. radiata* not worthy of recognition. Because the extremes are so different in appearance, because the narrow-leaved one is geographically segregated, and because it is a significant piece of evidence about the history of the Southeastern flora, I think that the formal designation of a variety is justified. Not having seen either Gandoger's or Urban's specimens, I prefer to supply an entirely new name based on material I have examined:

Hyptis alata var. stenophylla Shinners, var. nov. Caulis (nodis exceptis) glaber vel subglaber. Folia caulina angusta plerumque laminis lanceolatis vel lineari-lanceolatis paucidenticulatis vel subintegris. TYPE: northwest of Loxahatchee in the Corbitt Wildlife Management area, Palm Beach Co., Florida, R. Kral 5657, 3 Sept. 1957 (holotype SMU, isotype FSU). "Frequent on moist to wet sandy peat of broad marsh and grass-sedge meadows." The leaf blades of these specimens are linear-lanceolate and subentire. In the following they are lanceolate and mostly few-toothed. All are from lower peninsular Florida. CHARLOTTE CO.: 15 miles north-northwest of Fort Myers, Kral 7502 (FSU). Caloose Experimental Range, southeastern Charlotte County, William P. Adams 218 (FSU). COLLIER CO. vicinity of Lake Trafford, about 3 miles west of Immokalee, Adams 208 (FSU). One mile south of Ochopee, Richard S. Mitchell 630 (FSU). DADE CO.: 5 miles west of Naranja, F. H. Sargent 6451 (SMU).

As indicated above, *H. leiocephala* Gandoger and *H. latidens* Urban are very probably synonyms of var. *stenophylla* rather than of var. *alata*. Unless it is desired to recognize two species, the precise disposition of these names is of no consequence.

I am greatly indebted to Dr. R. K. Godfrey for the loan of herbarium material from Florida State University.— LLOYD H. SHINNERS, SOUTHERN METHODIST UNIVERSITY, DALLAS 22, TEXAS.

MAKERS OF NORTH AMERICAN BOTANY¹

Who are the Makers of North American Botany? — When Dumas Malone and his associates organized the *Dictionary of American Biography* they posed the simple criterion when selecting the persons to be included: Did the botanist influence the American scene? Certainly not only the innovators but those who developed the science should be included. The *DAB* includes forty botanists² that are not mentioned by Humphrey. They are:

¹Makers of North American Botany. By Harry Baker Humphrey. Edited by Robert R. Humphrey. Ronald Press, New Pork. \$6.00 xi + 265 pp. 1961.

²See DAB Index volume, 373. 1943 and Supplements I and II.